



State of Ohio Environmental Protection Agency

Northeast District Office

2110 East Aurora Rd.
Twinsburg, Ohio 44087

TELE: (330) 963-1200 FAX: (330) 487-0769
www.epa.state.oh.us

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

April 7, 2010

RE: FIRSTENERGY ASHTABULA POWER PLANT
(PLANTS A AND B)
NPDES PERMIT NO. 3IB00012*KD
ASHTABULA TWP, ASHTABULA COUNTY
COMPLIANCE INSPECTION EVALUATION

Mr. Scott F. Brown, P.E., Environmental Engineer
FirstEnergy Generation Corporation
76 South Main Street
Akron, Ohio 44308

Dear Mr. Brown:

On April 1, 2010, a site inspection was conducted at the above referenced facility at 2133 Lake Road East (State Route 531), Ashtabula Township, Ashtabula County. The inspection was conducted by John Schmidt and Erm Gomes of this office. Scott Brown, and Kimberly Sade from FirstEnergy's Environmental Office, Dianna Henslee, Plant Environmental Officer, and Ron Meyer, Plant Manager represented FirstEnergy Generation Group. Mr. Meyer participated in the pre-tour meeting only. The purpose of the inspection was to evaluate the facility's compliance status with respect to the terms and conditions of the facility's National Pollutant Discharge Elimination System (NPDES) permit.

The system consists of the following industrial processes and discharges (see attached figure):

Cooling Water

Cooling water from the plant's boilers is discharged to Lake Erie through Outfall 001. An average of 222 MGD is permitted through this outfall, although the plant is maintaining the minimum flow of 70 MGD as the plant is in standby mode. As a precaution, Lake Erie at the outfall contains a surface boom.

Ash Ponds

Bottom ash and fly ash from the boilers is collected and pumped as liquid slurry to hydrobins for solid separation, with wash water collected in ash ponds located adjacent to Lake Erie. Ash is manually removed by backhoe from the ponds for disposal at a landfill. Clarified water is discharged to Lake Erie via Outfall 002. An average of 231,000 gpd is permitted through this outfall, although actual discharge is significantly less due to the standby mode of the facility.

Coal Pile Runoff

Runoff from coal piles south of SR 531 is collected in two ponds, and then flows by gravity to the CPR Building (station 604), where it is intercepted by a lift station. Ash pile runoff is also diverted to this pump station, as is metal cleaning wastes via Outfall 615. The pump station generally pumps at 120 gpm, but actual flow rates can vary from about 80 gpm to 120 gpm (Outfall 604). pH adjustment includes mixing through a three-stage rapid mix neutralization consisting of three tanks in series: the first raises the pH to 6.5, the second tank raises the pH to 7.5, and the third tank raises the pH to 8.5. Polymer is added and mixed in a fourth tank (flocculation tank), sent to a clarifier for final discharge to Lake Erie through Outfall 002. Sludge is sent to a thickener and disposed of off-site at a landfill. As a precaution, Lake Erie at the outfall contains a surface boom.

Boiler Blow-down

Blow-down water and condenser cooling water from the plant's boilers is discharged to the condenser cooling water through Outfall 605, where it joins Outfall 001 for discharge to Lake Erie. As a precaution, Lake Erie at the outfall contains a surface boom.

Metal Cleaning Waste System

Metal cleaning wastes, air heater wash water, and chemical cleaning wastes are diverted to the metals cleaning waste system. Outfall 615 is monitored before manually pumping the effluent to the CPR building for neutralization through lime addition, chemical precipitation in a retention pond. Clarified water flows through a flow meter prior to discharge to Lake Erie through Outfall 002. Sludge is manually removed for transport to a landfill for disposal.

Low Volume (Oily Waste) System

Regeneration wastes, and floor drains are collected in the low flow waste basin. Wastewaters are filtered and monitored prior to discharge to Lake Erie via Outfall 006.

Observations

Following are observations made during the inspection.

1. Outfall 001 was observed to be discharging approximately 70 MGD and was producing a clear effluent. The design flow of the cooling water discharge system is 222 MGD. The plant must maintain a minimum flow of 70 MGD to ensure good mixing from Millennium Chemicals (9 MGD) and Elkem Metals (2-4 MGD).
2. The ash ponds were being dredged at the time of the inspection, with ash piled under the overhead rail bridge where the exhumed ash dewaterers. Dewatering areas must be within concrete pad areas that facilitate drainage back into the ash ponds.

3. Outfall 002 was not discharging at the time of the inspection. The metals cleaning holding basin was observed as containing rain water.
4. The effluent from the low flow/oily wasted holding pond was observed as flowing clear, although no skimmer was observed. FirstEnergy personnel indicated that a boom is used and that a skimmer is on order.
5. The overall condition of the treatment plant during this inspection was satisfactory. Better housekeeping should be employed in the three-stage rapid mix neutralization area to prevent deterioration of the plant equipment from contact with lime.
6. The hydrobins were observed as leaking. FirstEnergy must explore alternatives to eliminate this leakage. Although leaking wastewater is intercepted by drains and diverted to the low volume / oily waste treatment system, wastewater could mix with storm water, especially in winter months.
7. One of the samplers in the NPDES building was apparently missing its thermometer to record sample temperature.

NPDES Permit Compliance Review

A review of the electronic discharge self-monitoring reports (eDMRs) received by Ohio EPA for the period January 1, 2007 through March 30, 2010 indicates apparent noncompliance of the terms and conditions of your NPDES permit. Specific instances of noncompliance are as follows:

Limit Violations

The following limit violations were noted for the period reviewed:

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
002	61942	pH, Minimum	1D Conc	6.0	5.	11/7/2007
001	00400	pH, Maximum	1D Conc	9.0	9.01	9/11/2007
002	61942	pH, Minimum	1D Conc	6.0	3.6	11/14/2008
002	61942	pH, Minimum	1D Conc	6.0	5.5	3/28/2008
002	61941	pH, Maximum	1D Conc	9.0	11.	12/1/2007
006	61941	pH, Maximum	1D Conc	9.0	9.1	12/14/2007
006	61941	pH, Maximum	1D Conc	9.0	9.5	6/25/2008
006	61941	pH, Maximum	1D Conc	9.0	9.9	5/9/2009
006	61941	pH, Maximum	1D Conc	9.0	9.9	5/12/2009
006	61942	pH, Minimum	1D Conc	6.0	4.6	5/12/2009
006	61942	pH, Minimum	1D Conc	6.0	2.	5/13/2009
006	61942	pH, Minimum	1D Conc	6.0	3.	5/18/2009

Mr. Scott F. Brown, P.E.
 First Energy Ashtabula Plant (Plants A-B) WWTP
 April 7, 2010
 Page 4 of 9

Please provide an explanation for these noncompliance events, along with steps to ensure they do not reoccur.

Reporting Violations

The following code/reporting violations were noted for the period reviewed:

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
002	50050	Flow Rate			AD	5/22/2009
002	50050	Flow Rate			AD	5/23/2009
002	50050	Flow Rate			AD	5/24/2009
006	50050	Flow Rate			AD	5/5/2009
006	50050	Flow Rate			AD	5/6/2009
006	50050	Flow Rate			AD	5/7/2009
006	50050	Flow Rate			AD	5/8/2009
006	50050	Flow Rate			AD	5/9/2009
006	50050	Flow Rate			AD	5/10/2009
006	50050	Flow Rate			AD	5/11/2009
006	50050	Flow Rate			AD	5/12/2009
006	50050	Flow Rate			AD	5/13/2009
006	50050	Flow Rate			AD	5/14/2009
006	50050	Flow Rate			AD	5/15/2009
006	50050	Flow Rate			AD	5/16/2009
006	50050	Flow Rate			AD	5/17/2009
006	50050	Flow Rate			AD	5/18/2009
006	50050	Flow Rate			AD	5/19/2009
006	50050	Flow Rate			AD	5/20/2009
006	50050	Flow Rate			AD	5/21/2009
006	50050	Flow Rate			AD	5/22/2009
006	50050	Flow Rate			AD	5/23/2009
006	50050	Flow Rate			AD	5/24/2009

Please provide an explanation as to why flow rates were not recorded in the eDMR for these dates.

The following frequency/reporting violations were noted for the period reviewed:

Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
604	00530	Total Suspended Solids	1/Week	1	0	01/01/2007
604	00400	pH	1/Week	1	0	01/01/2007
604	00530	Total Suspended Solids	1/Week	1	0	01/22/2007
604	00400	pH	1/Week	1	0	01/22/2007

Mr. Scott F. Brown, P.E.
 First Energy Ashtabula Plant (Plants A-B) WWTP
 April 7, 2010
 Page 5 of 9

Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
604	00530	Total Suspended Solids	1/Week	1	0	02/01/2007
604	00400	pH	1/Week	1	0	02/01/2007
604	00530	Total Suspended Solids	1/Week	1	0	02/22/2007
604	00400	pH	1/Week	1	0	02/22/2007
604	00530	Total Suspended Solids	1/Week	1	0	03/22/2007
604	00400	pH	1/Week	1	0	03/22/2007
604	00530	Total Suspended Solids	1/Week	1	0	04/15/2007
604	00400	pH	1/Week	1	0	04/15/2007
604	00530	Total Suspended Solids	1/Week	1	0	04/22/2007
604	00400	pH	1/Week	1	0	04/22/2007
604	00530	Total Suspended Solids	1/Week	1	0	05/15/2007
604	00400	pH	1/Week	1	0	05/15/2007
604	00530	Total Suspended Solids	1/Week	1	0	05/22/2007
604	00400	pH	1/Week	1	0	05/22/2007
604	50050	Flow Rate	1/Day	1	0	06/01/2007
604	00400	pH	1/Week	1	0	06/01/2007
604	50050	Flow Rate	1/Day	1	0	06/02/2007
604	50050	Flow Rate	1/Day	1	0	06/03/2007
604	50050	Flow Rate	1/Day	1	0	06/04/2007
604	50050	Flow Rate	1/Day	1	0	06/05/2007
604	50050	Flow Rate	1/Day	1	0	06/06/2007
604	50050	Flow Rate	1/Day	1	0	06/07/2007
604	00530	Total Suspended Solids	1/Week	1	0	06/08/2007
604	50050	Flow Rate	1/Day	1	0	06/08/2007
604	00400	pH	1/Week	1	0	06/08/2007
604	50050	Flow Rate	1/Day	1	0	06/09/2007
604	50050	Flow Rate	1/Day	1	0	06/10/2007
604	50050	Flow Rate	1/Day	1	0	06/11/2007
604	50050	Flow Rate	1/Day	1	0	06/12/2007
604	50050	Flow Rate	1/Day	1	0	06/13/2007
604	50050	Flow Rate	1/Day	1	0	06/14/2007
604	00530	Total Suspended Solids	1/Week	1	0	06/15/2007
604	50050	Flow Rate	1/Day	1	0	06/15/2007
604	00400	pH	1/Week	1	0	06/15/2007
604	50050	Flow Rate	1/Day	1	0	06/16/2007
604	50050	Flow Rate	1/Day	1	0	06/17/2007
604	50050	Flow Rate	1/Day	1	0	06/18/2007
604	50050	Flow Rate	1/Day	1	0	06/19/2007
604	50050	Flow Rate	1/Day	1	0	06/20/2007
604	50050	Flow Rate	1/Day	1	0	06/21/2007
604	50050	Flow Rate	1/Day	1	0	06/22/2007
604	50050	Flow Rate	1/Day	1	0	06/23/2007
604	50050	Flow Rate	1/Day	1	0	06/28/2007

Mr. Scott F. Brown, P.E.
 First Energy Ashtabula Plant (Plants A-B) WWTP
 April 7, 2010
 Page 6 of 9

Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
604	50050	Flow Rate	1/Day	1	0	06/29/2007
604	50050	Flow Rate	1/Day	1	0	06/30/2007
604	00530	Total Suspended Solids	1/Week	1	0	08/01/2007
604	00400	pH	1/Week	1	0	08/01/2007
604	00530	Total Suspended Solids	1/Week	1	0	08/08/2007
604	00400	pH	1/Week	1	0	08/08/2007
604	00530	Total Suspended Solids	1/Week	1	0	08/15/2007
604	00400	pH	1/Week	1	0	08/15/2007
002	00530	Total Suspended Solids	3/Week	3	2	08/22/2007
604	00400	pH	1/Week	1	0	08/22/2007
006	00530	Total Suspended Solids	3/Week	3	2	08/22/2007
604	00530	Total Suspended Solids	1/Week	1	0	10/01/2007
604	00400	pH	1/Week	1	0	10/01/2007
604	00530	Total Suspended Solids	1/Week	1	0	10/08/2007
604	00400	pH	1/Week	1	0	10/08/2007
604	00530	Total Suspended Solids	1/Week	1	0	10/15/2007
604	00400	pH	1/Week	1	0	10/15/2007
604	00530	Total Suspended Solids	1/Week	1	0	11/01/2007
604	00400	pH	1/Week	1	0	11/01/2007
613	00530	Total Suspended Solids	3/Week	3	0	12/01/2007
613	50050	Flow Rate	1/Day	1	0	12/01/2007
613	00400	pH	3/Week	3	1	12/01/2007
613	01042	Copper, Total (Cu)	3/Week	3	0	12/01/2007
613	00550	Oil and Grease, Total	3/Week	3	0	12/01/2007
613	01045	Iron, Total (Fe)	3/Week	3	0	12/01/2007
613	50050	Flow Rate	1/Day	1	0	12/02/2007
613	50050	Flow Rate	1/Day	1	0	12/03/2007
613	50050	Flow Rate	1/Day	1	0	12/04/2007
613	50050	Flow Rate	1/Day	1	0	12/05/2007
613	50050	Flow Rate	1/Day	1	0	12/06/2007
613	50050	Flow Rate	1/Day	1	0	12/07/2007
613	00530	Total Suspended Solids	3/Week	3	0	12/08/2007
613	50050	Flow Rate	1/Day	1	0	12/08/2007
613	00400	pH	3/Week	3	0	12/08/2007
613	01042	Copper, Total (Cu)	3/Week	3	0	12/08/2007
613	00550	Oil and Grease, Total	3/Week	3	0	12/08/2007
613	01045	Iron, Total (Fe)	3/Week	3	0	12/08/2007
613	50050	Flow Rate	1/Day	1	0	12/09/2007
613	50050	Flow Rate	1/Day	1	0	12/10/2007
613	50050	Flow Rate	1/Day	1	0	12/11/2007
613	50050	Flow Rate	1/Day	1	0	12/12/2007
613	50050	Flow Rate	1/Day	1	0	12/13/2007
613	50050	Flow Rate	1/Day	1	0	12/14/2007

Mr. Scott F. Brown, P.E.
 First Energy Ashtabula Plant (Plants A-B) WWTP
 April 7, 2010
 Page 7 of 9

Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
613	00530	Total Suspended Solids	3/Week	3	0	12/15/2007
613	50050	Flow Rate	1/Day	1	0	12/15/2007
613	00400	pH	3/Week	3	0	12/15/2007
613	01042	Copper, Total (Cu)	3/Week	3	0	12/15/2007
613	00550	Oil and Grease, Total	3/Week	3	0	12/15/2007
613	01045	Iron, Total (Fe)	3/Week	3	0	12/15/2007
613	50050	Flow Rate	1/Day	1	0	12/16/2007
613	50050	Flow Rate	1/Day	1	0	12/17/2007
613	50050	Flow Rate	1/Day	1	0	12/18/2007
613	50050	Flow Rate	1/Day	1	0	12/19/2007
613	50050	Flow Rate	1/Day	1	0	12/20/2007
613	50050	Flow Rate	1/Day	1	0	12/21/2007
604	00530	Total Suspended Solids	1/Week	1	0	12/22/2007
604	00400	pH	1/Week	1	0	12/22/2007
613	00530	Total Suspended Solids	3/Week	3	0	12/22/2007
613	50050	Flow Rate	1/Day	1	0	12/22/2007
613	00400	pH	3/Week	3	0	12/22/2007
613	01042	Copper, Total (Cu)	3/Week	3	0	12/22/2007
613	00550	Oil and Grease, Total	3/Week	3	0	12/22/2007
613	01045	Iron, Total (Fe)	3/Week	3	0	12/22/2007
613	50050	Flow Rate	1/Day	1	0	12/23/2007
613	50050	Flow Rate	1/Day	1	0	12/24/2007
613	50050	Flow Rate	1/Day	1	0	12/25/2007
613	50050	Flow Rate	1/Day	1	0	12/26/2007
613	50050	Flow Rate	1/Day	1	0	12/27/2007
613	50050	Flow Rate	1/Day	1	0	12/28/2007
613	50050	Flow Rate	1/Day	1	0	12/29/2007
613	50050	Flow Rate	1/Day	1	0	12/30/2007
613	50050	Flow Rate	1/Day	1	0	12/31/2007
604	00530	Total Suspended Solids	1/Week	1	0	01/01/2008
604	00400	pH	1/Week	1	0	01/01/2008
604	00530	Total Suspended Solids	1/Week	1	0	01/22/2008
604	00400	pH	1/Week	1	0	01/22/2008
604	00530	Total Suspended Solids	1/Week	1	0	02/22/2008
604	00400	pH	1/Week	1	0	02/22/2008

Please provide an explanation as to why these parameters were not recorded in the eDMR for these dates.

If First Energy feels some of Ohio EPA's reporting records are in error, you may wish to reenter this information through the eDMR system or mail your data to Ohio EPA DSW central office and request that the data be entered on your behalf. Ohio EPA's eDMR support staff may also be available to assist you in this matter. E-mailing questions to

Mr. Scott F. Brown, P.E.
First Energy Ashtabula Plant (Plants A-B) WWTP
April 7, 2010
Page 8 of 9

James.Roberts@epa.state.oh.us is the quickest way to get a response if you have a specific question with the eDMR program or how to make corrections to what is reported in the eDMR program.

Compliance Schedule Violations

No compliance schedule violations were noted for the period reviewed.

Based upon the inspection findings and the overall compliance record of the facility, the facility is considered to be in substantial compliance; however the above limit, reporting frequency, and reporting code violations must be explained, along with a resolution. Noncompliance issues noted in Observations 2, 4, 5, 6, and 7 must be explained, as well as documentation provided as to their resolution.

Please inform this office, in writing, within 30 days of the date of this letter as to the actions we discussed that have been or will be taken to correct the above noncompliance or explanations if you believe the noncompliance issues noted are in error. Your response to this letter should include the dates that the actions have been or will be completed. Please be advised that past or present issues of noncompliance can continue as subjects of future enforcement actions by Ohio EPA.

If you have any questions or comments regarding this notification, please feel free to contact me at (330) 963-1175.

Respectively,

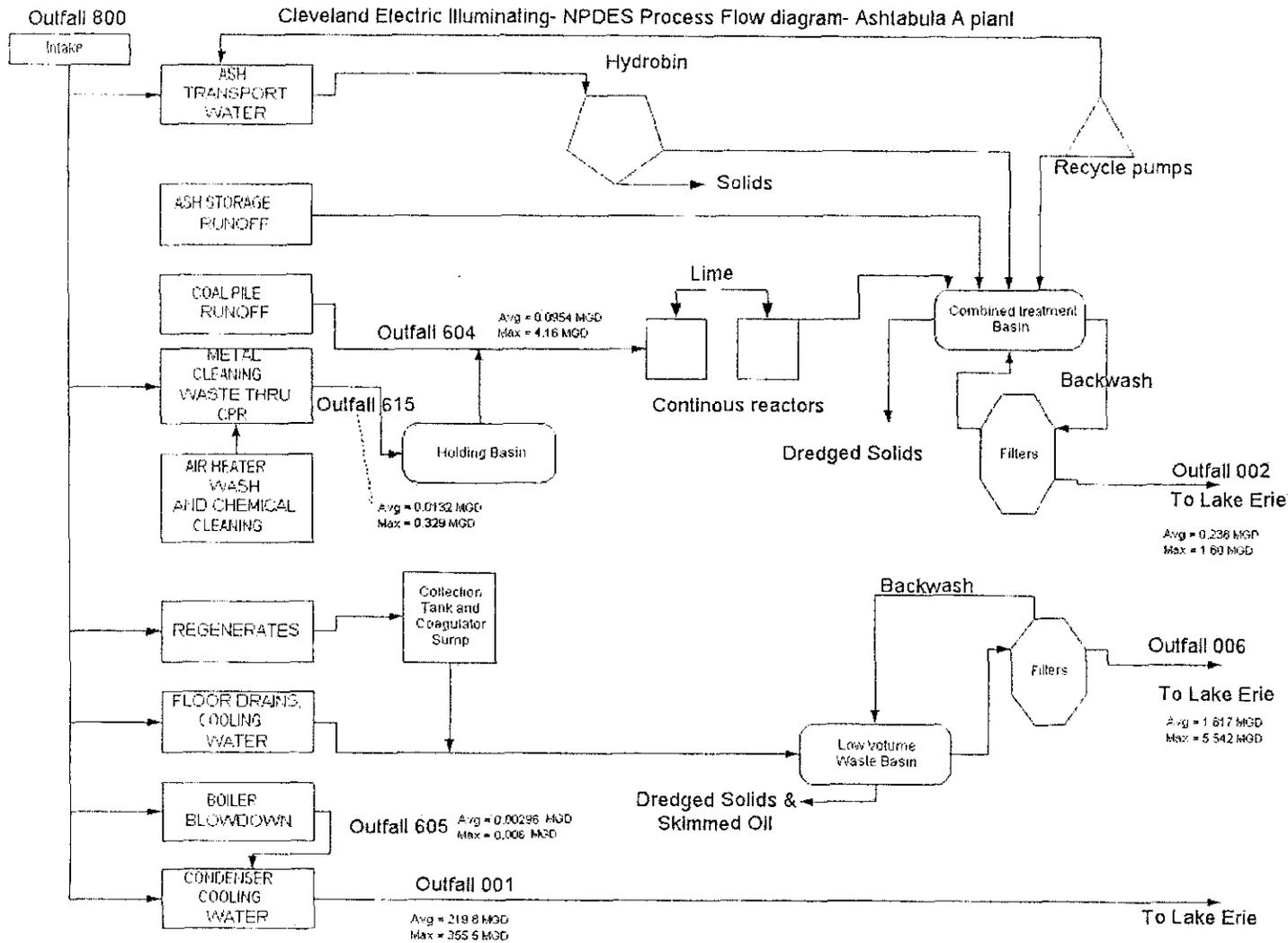


John M. Schmidt P.E., R.S.
Environmental Engineer
Division of Surface Water

JMS/mt

att: Process flow Diagram, Permit 3IB00012

pc: Dianna Henslee, FirstEnergy Ashtabula Plant



Get New Data

Permit No	Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
31B00012*KD	November 2008	002	61942	pH, Minimum	1D Conc	6.0	3.6	11/14/2008
31B00012*KD	May 2009	006	61941	pH, Maximum	1D Conc	9.0	9.9	5/9/2009
31B00012*KD	May 2009	006	61941	pH, Maximum	1D Conc	9.0	9.9	5/12/2009
31B00012*KD	May 2009	006	61942	pH, Minimum	1D Conc	6.0	4.6	5/12/2009
31B00012*KD	May 2009	006	61942	pH, Minimum	1D Conc	6.0	2.	5/13/2009
31B00012*KD	May 2009	006	61942	pH, Minimum	1D Conc	6.0	3.	5/18/2009

Get New Data

Permit No	Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
31B00012*KD	May 2009	006	50050	Flow Rate			AD	5/5/2009
31B00012*KD	May 2009	006	50050	Flow Rate			AD	5/6/2009
31B00012*KD	May 2009	006	50050	Flow Rate			AD	5/7/2009
31B00012*KD	May 2009	006	50050	Flow Rate			AD	5/8/2009
31B00012*KD	May 2009	006	50050	Flow Rate			AD	5/9/2009
31B00012*KD	May 2009	006	50050	Flow Rate			AD	5/10/2009
31B00012*KD	May 2009	006	50050	Flow Rate			AD	5/11/2009
31B00012*KD	May 2009	006	50050	Flow Rate			AD	5/12/2009
31B00012*KD	May 2009	006	50050	Flow Rate			AD	5/13/2009
31B00012*KD	May 2009	006	50050	Flow Rate			AD	5/14/2009
31B00012*KD	May 2009	006	50050	Flow Rate			AD	5/15/2009
31B00012*KD	May 2009	006	50050	Flow Rate			AD	5/16/2009
31B00012*KD	May 2009	006	50050	Flow Rate			AD	5/17/2009
31B00012*KD	May 2009	006	50050	Flow Rate			AD	5/18/2009
31B00012*KD	May 2009	006	50050	Flow Rate			AD	5/19/2009
31B00012*KD	May 2009	006	50050	Flow Rate			AD	5/20/2009
31B00012*KD	May 2009	006	50050	Flow Rate			AD	5/21/2009
31B00012*KD	May 2009	002	50050	Flow Rate			AD	5/22/2009
31B00012*KD	May 2009	006	50050	Flow Rate			AD	5/22/2009
31B00012*KD	May 2009	002	50050	Flow Rate			AD	5/23/2009
31B00012*KD	May 2009	006	50050	Flow Rate			AD	5/23/2009
31B00012*KD	May 2009	002	50050	Flow Rate			AD	5/24/2009
31B00012*KD	May 2009	006	50050	Flow Rate			AD	5/24/2009

[Get New Data](#)

Permit No	Reporting Period	Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
-----------	------------------	---------	----------------	-----------	------------------	----------	----------	----------------